NASA

Aerospace Medicine and Biology
1990 Cumulative Index

NASA SP-7011 (345)
January 1991

National Aeronautics and
Space Administration

Aerospace Medicine & Biology Aerospace Medicine & Biology Aerospace Medicine & Biology Aerospace Medicine & Biology Aerospace Medicine & Biology Aerospace Medicine & Biology Aerospace Medicine & Biology Aerospace Medicine & Biology Aerospace Medicine & Biology Aerospace Medicine & Biology Aerospace Medicine & Biology Aerospace Medicine & Biology Aerospace Medicine & Biology Aerospace Medicine & Biology

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NASA SP-7011(345)

A CUMULATIVE INDEX
TO
A CONTINUING BIBLIOGRAPHY ON

AEROSPACE MEDICINE AND BIOLOGY

This Cumulative Index supersedes the indexes contained in supplements [SP-7011(333) through SP-7011(344)] published by NASA during 1990.

National Aeronautics and Space Administration
Office of Management
Scientific and Technical Information Division
Washington, DC 1991

This index is available from the National Technical Information Service (NTIS), Springfield, Virginia 22161 at the price of $19.50 domestic; $39.00 foreign.

INTRODUCTION

WHAT THIS CUMULATIVE INDEX IS

This publication is a cumulative index to the abstracts contained in NASA SP-7011(333) through NASA SP-7011(344) of *Aerospace Medicine and Biology: A Continuing Bibliography,* NASA SP-7011, and by means of supplements, serves as a current abstracting and announcement journal for references on bioscience and biotechnology. It has been compiled through the cooperative efforts of the American Institute of Aeronautics and Astronuatics (AIAA), and the National Aeronautics and Space Administration (NASA). Entries prepared by the two contributing organizations are identified as follows:

1. NASA entries by their *STAR* accession numbers (N90-10000).
2. AIAA entries by their *IAA* accession numbers (A90-10000 series).

HOW THIS CUMULATIVE INDEX IS ORGANIZED

This Cumulative Index includes a subject, personal author, corporate source, foreign technology, contract number, report number, and accession number index.

HOW TO USE THE SUBJECT INDEX

Two types of cross-references appear in the subject index:

1. Use (U) references indicate that the subject term is not "postable," i.e., not a valid term, and that the following term or terms are used instead. For example:

   DOSE
   U DOSAGE
   AIRLINERS
   U COMMERCIAL AIRCRAFT
   U PASSENGER AIRCRAFT

2. Narrower Term (NT) references refer the user to more specific headings in the same subject area, under which additional material on the subject may be found. For example:

   FATIGUE (BIOLOGY)
   NT AUDITORY FATIGUE
   NT FLIGHT FATIGUE
   NT MUSCULAR FATIGUE

In addition, a searcher may use the title or title and title extension in the index to narrow further his quest for particular items; this is because subject terms may include documents on different aspects of the same subject term. For example:

BIOLOGICAL EFFECT
Vibratory force effect upon biological systems, particularly human organism.
Biological effect of cosmic and solar radiations on human body at high altitudes.

HOW TO USE THE PERSONAL AUTHOR INDEX

All personal authors used in the abstract-section citations in the indiviudal Supplements appear in the index. Differences in translation schemes may require multiple searching on the index for variants of an author's name. For example:

EMELIANOV, M. D.
and
YEMELYANOV, M. D.

HOW TO USE THE CORPORATE SOURCE INDEX

The corporate source index entries are abridged versions of the corporate sources used in the abstract-section citations in the individual Supplements. The corporate source supplementary (organizational component) does not appear in the index. For example:

BOEING CO., SEATTLE, WASH. MILITARY AIRCRAFT SYSTEMS DIV. (Source citation entry)
BOEING CO., SEATTLE, WASH. (Source index entry)

HOW TO USE THE FOREIGN TECHNOLOGY INDEX

The foreign technology index identifies research performed outside of the United States. Listings in this index are arranged alphabetically by country of intellectual origin. For example:

CHINA, PEOPLE'S REPUBLIC OF

HOW TO USE THE CONTRACT NUMBER INDEX

All contract numbers that are identified in the abstract-section citations in the individual Supplements appear in this index. Changes by agencies in the style in which contract numbers are presented may require multiple searching for variants. For example:

AF 33(615)-71-C-1758

F33615-71-C-1758

HOW TO USE THE REPORT/ACCESSION NUMBER INDEX

All report numbers that have been assigned by the corporate source, monitoring agency or cataloging activity appear in this index. Variations in cataloging may result in different report number series. For example:

TP-924

ONERA-TP-924

IDENTIFICATION OF DESIRED SUPPLEMENT

The abstract and descriptive cataloging for any accession number selected from the indexes may be found in the appropriate Supplement. The page-number range of each Supplement appears on the inside front cover of this index. Once the range of page numbers containing the selected accession number is located in the second column, the desired supplement number will be found in the first column. For example:

Page 138 will be found in Supplement 337

AVAILABILITY OF DOCUMENTS

Information concerning the availability of documents announced in *Aerospace Medicine & Biology* is found in the Introduction to the most currently issued *Supplement.*

PUBLIC COLLECTIONS OF NASA DOCUMENTS

DOMESTIC: NASA and NASA-sponsored documents and a large number of aerospace publications are available to the public for reference purposes at the library maintained by the American Institute of Aeronautics and Astronautics, Technical Information Service, 555 West 57th Street, 12th Floor, New York, New York 10019.

EUROPEAN: An extensive collection of NASA and NASA-sponsored publications is maintained by the British Library Lending Division, Boston Spa, Wetherby, Yorkshire, England for public access. The British Library Lending Division also has available many of the non-NASA publications cited in *STAR.* European requesters may purchase facsimile copy or microfiche of NASA and NASA-sponsored documents, those identified by both the symbols # and * from ESA — Information Retrieval Service European Space Agency, 8-10 rue Mario-Nikis, 75738 CEDEX 15, France.

FEDERAL DEPOSITORY LIBRARY PROGRAM

In order to provide the general public with greater access to U.S. Government publications, Congress established the Federal Depository Library Program under the Government Printing Office (GPO), with 51 regional depositories responsible for permanent retention of material, inter-library loan, and reference services. At least one copy of nearly every NASA and NASA-sponsored publication, either in printed or microfiche format, is received and retained by the 51 regional depositories. A list of the regional GPO libraries, arranged alphabetically by state, appears on the inside back cover. These libraries are *not* sales outlets. A local library can contact a Regional Depository to help locate specific reports, or direct contact may be made by an individual.

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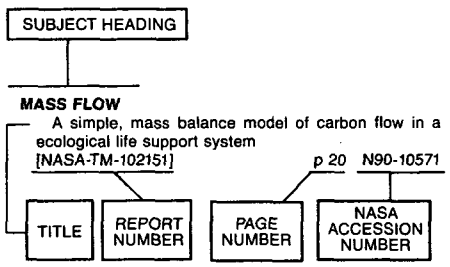
1990 Cumulative Index

January 1991

Typical Subject Index Listing



The subject heading is a key to the subject content of the document. The title is used to provide a description of the subject matter. When the title is insufficiently descriptive of document content, a title extension is added, separated from the title by three hyphens. The (NASA or AIAA) accession number and the page number are included in each entry to assist the user in locating the abstract in the abstract section. If applicable, a report number is also included as an aid in identifying the document. Under any one subject heading, the accession numbers are arranged in sequence with the AIAA accession numbers appearing first.

A

B

BIOCHEMISTRY

BIOCONTROL SYSTEMS

BIOCONVERSION

BIODEGRADATION

BIODYNAMICS

C

D

E

F

G

H

HUMAN FACTORS LABORATORIES

HUMAN PATHOLOGY

HUMAN PERFORMANCE

I

J

M

MANNED MARS MISSIONS

N

O

P

PILOT SELECTION

Q

R

S

T

U

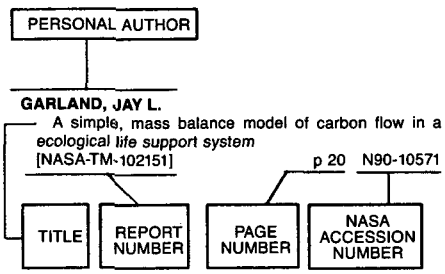
V

W

X

Y

Typical Personal Author Index Listing



Listings in this index are arranged alphabetically by personal author. The title of the document provides the user with a brief description of the subject matter. The report number helps to indicate the type of document listed (e.g., NASA report, translation, NASA contractor report). The page and accession numbers are located beneath and to the right of the title. Under any one author's name the accession numbers are arranged in sequence with the AIAA accession numbers appearing first.

A

B

C

D

E

F

G

H

I

J

K

L

M

N

O

P

Q

R

S

T

U

V

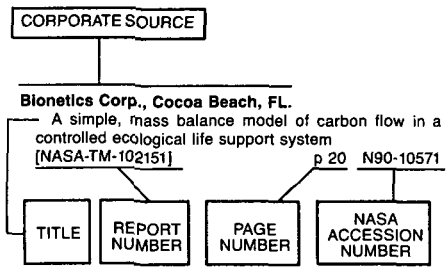
W

X

Y

Z

Typical Corporate Source Index Listing



Listings in this index are arranged alphabetically by *corporate source*. The title of the document is used to provide a brief description of the subject matter. The page number and the accession number are included in each entry to assist the user in locating the abstract in the abstract section. If applicable, a report number is also included as an aid in identifying the document.

A

SOURCE

B

C

D

E

F

G

H

I

J

K

L

M

N

O

P

Q

R

S

T

U

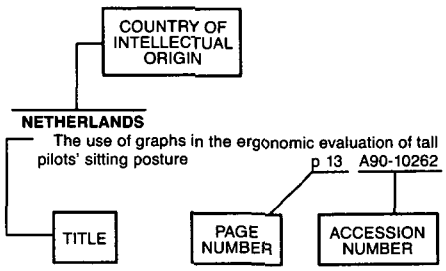
V

W

Y

Z

Typical Foreign Technology Index Listing



Listings in this index are arranged alphabetically by country of intellectual origin. The title of the document is used to provide a brief description of the subject matter. The page number and the accession number are included in each entry to assist the user in locating the citation in the abstract section. If applicable, a report number is also included as an aid in identifying the document.

A

B

C

FOREIGN

D

F

G

I

J

JAPAN

L

LITHUANIA

M

MEXICO

N

NETHERLANDS

P

S

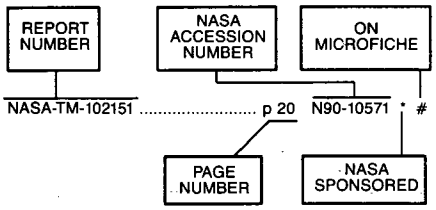
U

UNITED KINGDOM

Y

YUGOSLAVIA

Typical Report Number Index Listing

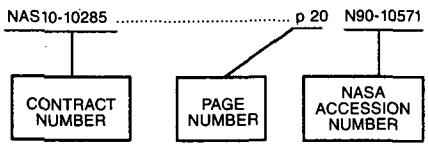


Listings in this index are arranged alphanumerically by report number. The page number indicates the page on which the citation is located. The accession number denotes the number by which the citation is identified. An asterisk (*) indicates that the item is a NASA report. A pound sign (#) indicates that the item is available on microfiche.

AEROSPACE MEDICINE AND BIOLOGY / *A Continuing Bibliography*
1990 Cumulative Index

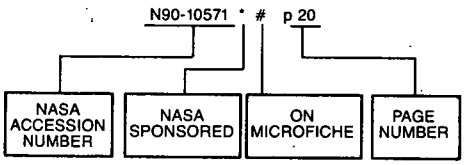
January 1991

Typical Contract Number Index Listing



Listings in this index are arranged alphanumerically by contract number. Under each contract number, the accession numbers denoting documents that have been produced as a result of research done under the contract are arranged in ascending order with the AIAA accession numbers appearing first. The accession number denotes the number by which the citation is identified in the abstract section. Preceding the accession number is the page number on which the citation may be found.

Typical Accession Number Index Listing



Listings in this index are arranged alphanumerically by accession number. The page number listed to the right indicates the page on which the citation is located. An asterisk (*) indicates that the item is a NASA report. A pound sign (#) indicates that the item is available on microfiche.

AEROSPACE MEDICINE AND BIOLOGY

A CONTINUING BIBLIOGRAPHY

Abstracts
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SPECIAL NOTICE

The abstract sections of the monthly supplements of *Aerospace Medicine and Biology* can be bound separately. Individual abstracts can be located readily by means of the page numbers given at each entry, e.g., p 251 N90-24993. To assist the user in binding Supplements SP-7011(333) through SP-7011(344), a title page is included in this Cumulative Index.

1. Report No.	2. Government Accession No.	3. Recipient's Catalog No.
NASA SP-7011 (345)		

4. Title and Subtitle	5. Report Date
AEROSPACE MEDICINE AND BIOLOGY A Cumulative Index to the 1990 Issues	January 1991
	6. Performing Organization Code NTT
7. Author(s)	8. Performing Organization Report No.
	10. Work Unit No.
9. Performing Organization Name and Address NASA Scientific and Technical Information Division	11. Contract or Grant No.
	13. Type of Report and Period Covered Special Publication
12. Sponsoring Agency Name and Address National Aeronautics and Space Administration Washington, DC 20546	14. Sponsoring Agency Code

15. Supplementary Notes

16. Abstract

This publication is a cumulative index to the abstracts contained in the Supplements 333 through 344 of Aerospace Medicine and Biology: A Continuing Bibliography. It includes seven indexes - subject, personal author, corporate source, foreign technology, contract number, report number, and accession number.

17. Key Words (Suggested by Authors(s))	18. Distribution Statement
Aerospace Medicine Bibliographies Biological Effects	Unclassified - Unlimited Subject Category - 52

19. Security Classif. (of this report)	20. Security Classif. (of this page)	21. No. of Pages	22. Price *
Unclassified	Unclassified	238	$19.50 HC

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